Appl. No. 09/747,760
Amdt. dated April 19, 2004
Reply to Office Action of November 19, 2003

PATENT

This listing of claims will replace all prior versions, and listings of claims in the application:

Listing of Claims:

     1-24.   (canceled)

     25.   (currently amended) ~~The method of claim 24, wherein~~

A method of screening drug candidates, comprising:

a) providing a B cell that expresses one or more expression profile genes selected from the group consisting of carb anh II, IgD, CD72, SATB1, ApoE, CD83, cyclin D2, Cctq, MEF-2C, TGIF, Aeg-2, lck, E2-20K, pcp-4, kappa V, neurogranin, NAB2, gfi-1 hIP-30, TRAP, bmk, CD36, Evi-2, vimetin, Ly6E.1 and c-fes;

b) adding a drug candidate to the B cell;

c) determining the expression level of the one or more expression profile genes in the B cell; ~~determining comprises determining the expression level of carb anh II, IgD, CD72, SATB1, ApoE, CD83, cyclin D2, Cctq, MEF-2C, TGIF, Aeg-2, lck, E2-20K, pcp-4, kappa V, neurogranin, NAB2, gfi-1 hIP-30, TRAP, bmk, CD36, Evi-2, vimetin, Ly6E.1 and/or c-fes; and~~

d) comparing the expression level of at least one gene of the one or more expression profile genes in the B cell with the expression level of the at least one gene in a control cell not contacted with the drug candidate; and

e) identifying the drug candidate ~~is identified~~ as a potential modulator of B cell tolerance if a difference in expression level is determined in the comparison of step d).

     26.   (previously presented) The method according to claim 25, wherein

determining comprises (i) determining whether expression of carb anh II, CD72, SATB1, ApoE, CD83, cyclin D2, Cctq, MEF-2C, TGIF, Aeg-2, lck, E2-20K, pcp-4, kappa V, neurogranin, NAB2 and/or gfi-1 is increased in the test cell relative to the control cell, or (ii) determining whether expression of Ly6E.1, vimentin, hIP-30, TRAP, bmk, CD36, Evi-2 and/or c-fes is decreased in the test cell relative to the control cell; and

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the drug candidate is identified as a potential modulator of B cell tolerance if the expression level of a gene listed in (i) is increased and/or the expression level of a gene listed in (ii) is decreased.

27-30. (canceled)

31. (currently amended) The method according to ~~claim 1~~ claim 25, further comprising performing a binding assay to determine if the drug candidate identified in step e) binds to the protein encoded by the at least one gene.

32. (currently amended) The method according to ~~claim 1~~ claim 25, further comprising performing an assay to determine if the drug candidate identified in step e) modulates an activity of the protein encoded by the at least one gene.

33. (currently amended) The method according to ~~claim 1~~ claim 25, wherein the expression levels of a plurality of expression profile genes are determined and compared.

34. (previously presented) The method according to claim 33, wherein the expression levels of at least three expression profile genes are determined and compared.

35. (previously presented) The method according to claim 34, wherein the expression levels of at least five expression profile genes are determined and compared.

36. (new) The method according to claim 26, wherein the drug candidate is identified as a potential modulator of B cell tolerance if the expression level of a gene listed in (i) is increased and the expression level of a gene listed in (ii) is decreased.

37. (new) The method of claim 25, wherein the expression level is determined from the amount of transcript expressed by the at least one gene.

38. (new) The method of claim 25, wherein the expression level is determined from the amount of protein expressed by the at least one gene.